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THE GENESEE FARMER:

Issued the first of each month, in Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE, EDITOR.

P. BARRY, Conductor of the Horticultural Department.

WITH this number closes the EIGHTH volume of the GENESEE FARMER. We have not space for extended remarks, and must therefore omit noticing some matters pertinent to the occasion. Were we to adopt a custom much in vogue at the present day, we should perhaps state that we have accomplished much less than we intended—and then promise ample amends for the future. But we are not inclined to discourse in that wise, for we have endeavored faithfully to discharge our duty to the readers of this journal, and the agricultural community. Whether that duty has been performed as it ought, and in the manner best calculated to benefit those for whom we have labored, each subscriber will judge for himself. We do not expect that ALL our readers have been particularly interested or benefitted by the perusal of the FARMER, yet we trust its pages have imparted appropriate and useful information to a large majority.

Our subscription list is now the largest, with a single exception, of any agricultural journal published in the United States—and we think our contributors and correspondents, in numbers and ability, are at least equal to those of any other similar journal. We are under great obligations to the numerous persons who have aided in promoting the usefulness of the Farmer, by extending its circulation and contributing to its pages. If continued, the assistance of such generous friends—without whose approval and influence we could do little or nothing to advance the cause of improvement—will enable us to make our next volume still more interesting and valuable. In consequence of the very low price of the Farmer a larger subscription list is necessary to sustain it properly. But we leave this matter with the Farmers and Horticulturists of the Country.

A Farmer's Library.

LONG winter evenings are close at hand. The season for reading good books, for studying the Science of Agriculture, has already arrived.—How greatly can we elevate our standing in society, our usefulness in the world, and increase our ability to command an independent livelihood, by the due improvement of all our leisure hours! Few young men justly appreciate the advantages which cheap books, and periodical journals like the Farmer, place within their reach. Rapid, careless, slips-hod reading is the crowning folly of the young men and women, whom it is our fortune to meet. They lack patience, perseverance, and untiring industry in the prosecution of useful studies. How few young farmers can show an agricultural library of twenty volumes. What would they think of the professional attainments of a lawyer, physician, or clergyman, whose reading in his calling was thus limited?

Permit a friend to suggest the purchase and *careful study* of Johnston's Lectures on Agricultural Chemistry and Geology; Boussingault's Rural Economy; Allen's American Agriculture; Lindley's Theory of Horticulture; and Liebig's Chemistry—not to name more expensive works.

We know of no contemporary agricultural journal unworthy of support; but to commend any one would seem invidious and unkind toward the others. We ask attention to the fact that, of the four millions of male adults employed in agriculture in the United States, not far from three millions nine hundred thousand, or thirty-nine in forty, take no paper of the kind. To them the experience and carefully conducted experiments of other practical farmers, become utterly valueless, so soon as they are printed on paper! The number who take agricultural papers in the State of New York is much larger than one in forty. But take the whole Union together, and our estimate is rather above than below the truth.—Friends of the Farmer and of the Writer, will you not aid the cause by doubling the subscription list of this journal for 1848? The volume shall be worthy of a place in any man's library.

Southern Agriculture.

The writer has long desired to study the *art* of Husbandry as practiced by the best farmers in every State of the Union. He now rejoices in an opportunity of learning what he may from the experience and practice of Southern planters. As at the North, very few make pretensions to a knowledge of Agricultural Chemistry, Geology, and the kindred sciences, which shed a flood of light on all rural operations. I find, however, a large number of observing, intelligent men, from whom I learn many interesting facts relating to tillage, and the organization of the most useful plants. In the north-western part of South Carolina good farmers grow winter wheat after this fashion:

The crop follows one of corn, which is planted in rows five feet apart. The ears are picked and hauled in a big wagon to some convenient place to be husked or "shucked." A plow, with no other working part than a coulter, is run two or three times through each row of corn, to tear it up by the roots. The large, long plants, including roots, stems, and leaves, are evenly spread with the butts all one way, like a winrow of brushwood made of small trees. The center between the rows of corn is first laid and covered with the plow, and so on till a bed is formed a little over four feet wide. On this bed wheat is sown and harrowed in without crossing the beds, and rolled in the same direction as plowed. The water course between the beds is cleared with the hoe, if needed. As heavy rains fall here in winter, it is highly important to provide for its easy escape. Wheat is often badly injured by the heaving of the earth from frost.

As an improvement on the above system of culture, (which gives from 12 to 20 bushels per acre,) I have recommended the application of 5 bushels of ashes, 5 of lime, and one of salt, per acre, to be scattered over the stalks before they are covered.

I find a good many farmers waiting now (7th November) for rain before they sow wheat. It is exceedingly dry in all this region (Augusta, Ga.) The thermometer in a cool brick store, on the first floor, ranges between 64 and 70 degrees.

I own myself the wiser for learnig that the best crops of barley and oats are made in this latitude and climate by seeding in the fall. I have seen several fields of barley now up, and soon to yield a good bite for winter feed, and to be harvested the last of May. Peas are not put into the ground till spring; and often after wheat, oats and barley are harvested, and on the same land.

I have seen a few acres of clover, but so far south as Augusta, it needs a good deal of nursing to make it live. I shall take another opportunity to speak of Southern grasses.

If the "cow pea" will do as well at the north as it does here when planted with corn (after the corn is up and plowed out,) its culture will be profitable. I do not think that its growth with corn injures materially the yield of the latter, while the quantity of peas harvested is large—say from ten to twenty bushels on good, strong land. This plant, as has been well remarked, is the clover of the South. It can be made to render invaluable service in the way of fertilizing poor lands.

The recent disastrous and extensive failures of commercial houses in London and Liverpool, have knocked down the price of cotton some three cents a pound. Its influence on dealers and planters in this region, can easily be imagined. Agriculturists begin to *see* as well as *feel* the importance of growing wool, of making far more beef, pork, butter, cheese, and grain than they now do. So far as I can learn, there is but one farmer in all Georgia who makes a pound of cheese. He is from New Jersey, and is literally coining money by selling all he makes at 15 to 18 cents a pound. In this small city, around which cows can be kept about as cheaply as in Western New York, milk is selling at *ten cents a quart*. Good cabbage at from 15 to 30 cents a head; they are brought from North Carolina and New England. Northern potatoes are selling at $3.00 a barrel; apples the same. Northern butter is worth from 25 to 30 cts. per lb. by the firkin. All the northern portion of Georgia is admirably adapted to the dairy business, stock, and wool growing. I shall have more to say of its capabilities after I have explored the region which lies several hundred miles at the base or southern declivity of the Alleghany mountains. It sends fine beef to this market, as well as pork and mutton.

The distance from this city to Charleston is 136 miles by a good railroad; to Savannah by the river and steamboats, it is about 200. Ordinary freights to New York are about 50 cents per 100 pounds. Augusta is at the head of navigation on the Savannah, there being rapids just above; although small boats of 20 tons bring down cotton many miles. This is a great market for this staple. Some of the ware-houses here cover an acre and a half of ground. The crop is far from being all gathered at this time. The average yield per acre is probably not more than 300 lbs. clean cotton. No crop varies more in its product.

D. L.

Fattening Poultry.—It is asserted in the "Transactions of the Society of Arts," that there is a great advantage in fattening geese, turkeys, and in short, fowls of every discription, on potatoes mixed with meal. On this diet they are said to fatten in less than one-half the time ordinarily required to bring them to the same condition of "excellence," on any kind of corn, or even on meal itself. The potatoes must be boiled and mashed fine while they are hot, and the meal added, just before the food is to be presented.

Northern Rice.

Gen. Verplanck, the Commissioner to negotiate a treaty with the Chippewas, in speaking of the wild rice which grows abundantly in Minnesota, says that it is better than the Southern rice. The berries are larger and its flavor is better; for when boiled and and stewed and left to cool it forms a consistent mass like good wheat bread, and more nutritious. Any quantity of it grows on all the lakes in this northern country. The outlets and bays are filled with it. It ripens in the month of August, and is the main reliance of the Indians during the winter months for their sustenance.

If this is truly a valuable plant, there are thousands of acres in all the northern States where it can be grown at a very small expense. Rice is confessedly the most remunerating crop cultivated at the South. One planter on the Savannah below where the editor now is, has received $40,000 for his crop this fall season. It grows almost spontaneously; as the wild rice in Minnesota does altogether, without seeding or culture. We know Gen. Verplanck. He is not a man to mis-state a fact of this character.—Gentemen residing at Galena or the Falls of St. Anthony can easily procure the seed. We should be glad to see a fair trial made with it on ground which can be suitably inundated with water.

A Remarkable Experiment.

A recent work of science gives the following novel experiment, which settles questions of some importance in philosophy:

"Two hundred pounds weight of earth were dried in an oven, and afterwards put into an earthen vessel. The earth was then moistened with rain water, and a willow tree, weighing 5 pounds, was planted therein. During the space of 5 years the earth was carefully watered with rain water, or pure water; the willow grew and flourished; and, to prevent the earth being mixed with fresh earth, or dust blown on it by the winds, it was covered with a metal plate perforated with a great number of small holes, suitable for the free admission of air only. After growing in the air for five years, the tree was removed, and found to weigh 169 pounds and about 3 ounces; the leaves which fell from the tree every autumn were not included in this weight. The earth was then removed from the vessel, again dried in the oven, and afterwards weighed; it was discovered to have lost only about 2 ounces of its original weight; thus 160 pounds of woody fibre, bark, and roots were certainly produced; but from what source? The air has been discovered to be the source of the solid element at least. This statement may at first appear incredible, but on slight reflection its truth is proved, because the atmosphere contains carbonic acid, and is a compound of 714 parts, by weight of oxygen, and 383 parts, by weight of carbon."

The above has been traveling the rounds of the American press for two months. We clip it from the National Intelligencer to remark that the statement can not be true, and is calculated to mislead the honest inquirers after truth. To say nothing of the half pound or more of earthy matter in the *ash* of the willow, the minerals in the leaves which were organized in five years would weigh more than two ounces. If we substitute *pounds* for ounces the statement may be correct.

Lime in Planting Trees.

Many object to planting trees, either for orchards or use, in consequence of the numerous failures they experience. This, however, it should be recollected is not a necessary result. With proper care there is no more difficulty in transplanting than in planting or propagating from the seed or germ. In setting trees, we have ever found that they do best when taken up in the fall, about the time the leaves drop. Fruit and forest trees, shrubs and perennial plants of all descriptions, may, at this season, be removed with perfect succes. In setting we usually put a small quantity of lime in the hole—about half a peck to a tree, mixing it thoroughly with the mold, in order that it may be easily accessible to the roots, which ramify in every direction in quest of food. An English publication says that an extensive plantation of trees has been formed within a few years, without the loss of a single tree, and this has been effected simply by putting a small quantity of lime in the hole before depositing the tree. Four bushels are said to be amply sufficient for an acre. The effect of the lime is "to push on the growth of the plant in the first precarious state." There seems to have existed, at first, an apprehension that liming the plant would force it on prematurely, but this apprehension experience has demonstrated to have been perfectly groundless.—*Maine Farmer.*

Of the benefit of lime about fruit trees we have long been convinced by its use. Old plaster, burnt shells and bones, exercise important and beneficial action, and especially in spots where a tree has failed and been removed, as without fresh earth and lime it is almost impossible to make a new tree thrive in the same place. All fresh manures are injurious to recently planted trees. Old and well rotted manures, rotted sods, or rich alluvial or virgin soil, is best. Make the holes large, and when half filled, puddle down with a pail of water; then fill up and not pack too hard, nor set the roots too deep. Fall planting of the apple, pear, and other hardy trees, is probably the best; but peaches, cherries, apricots, &c., do best set very early in spring, before the sap moves.

The success of young fruit trees imperiously depends upon the cultivation of the land in some hoed crop, and proper manuring. When they have got a sufficient size for general bearing, they may be put in grass. Clover, by its long tap roots, seems to exercise injurious effects.—Timothy and other grasses are preferable; in those even it should not lay too long without plowing.

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A Valuable Table.—The following table compiled from the calculations of J. M. Garnet, Esq., of Virginia, will be found exceedingly valuable to many of our readers:

A box 24 inches by 16 inches square and 22 inches deep, will contain a barrel, or 10,852 cubic inches.

A box 24 inches by 16 inches square and 11 inches deep, will contain half a barrel, or 5,476 cubic inches.

A box 16 inches by 16.8 inches square and 8 inches deep, will contain one bushel, or 2,150.4 cubic inches.

A box 12 inches by 11.2 inches square and 8 inches deep, will contain half a bushel, or 1,075 cubic inches.

A box 8 inches by 8.4 inches square and 6 inches deep, will contain one peck, or 537.1 cubic inches.

A box 8 inches by 8 inches square and 4.2 inches deep, will contain one half peck, or 268.8 cubic inches.

A box 7 inches by 4 inches square and 4.8 inches deep, will contain a half a gallon, or 131.4 cubic inches.

A box 4 inches by 4 inches square and 4.2 inches deep, will contain one quart, or 67.2 cubic inches.

Hints for December.

Potatoes have turned out worse than any body anticipated. Look out for your winter stock; overhaul, examine, and select, or the whole bin will be a mass of putrefaction. The first fair day open those that are buried, and see if all is right. It is a good plan to leave a small hole in the top of the heap where potatoes are buried, and fill with a wisp of straw the size of your arm, as a ventilator. Bagas and turneps will not keep well without this precaution.

Stable your cattle if possible. The saving in manure will pay for the extra labor, and the saving in quantity of food consumed is clear gain. The animal system is like a cold room with a stove—the colder the weather the more wood is required. The greater degree of cold and exposure the animal undergoes, the greater quantity of food is required. The decomposition of food and its recomposition into the various nutriments required by the system, is the sole cause of animal heat.

Don't let you stock get poor by being left too long to subsist on the dead and frost burnt pastures; a stern chase is a long chase, and it is an unprofitable operation to have to lift cattle by the tail all winter, that come into the yard poor.—The cheapest way to mend this defect, is to give each creature about two ears of corn per day, till they recover their flesh. Sugar beets or carrots are still better, particularly for milch cows.

Store hogs will winter on ruta bagas, but much better on the sugar beet. A greater amouut of nutriment can be produced from an acre in beets and carrots, and with less labor, than from any other crop. One acre of good soil in roots may be made to produce as much actual food, as the general average of fifteen acres in hay.

Push on your fatting hogs, and to assist them to assimilate and convert their food quickly and profitably, cook all their food, or their stomachs will have to do it at your expence. Remember that Indian corn makes fat only, while other food makes more muscle or red flesh than oleaginous matter.

Blanket your horses with good sized articles, well lined, with a breast strap and crupper, confined by a surcingle. And don't stint them in bedding. It is a comfort to the animal, absorbs the urine, which is worth twelve times as much as the solid droppings, and will add immensely to the manure heap. Digestion is carried on very slowly when the animal system is heavily taxed with labor; water often, but feed lightly during the working hours; let the principal feed be given at evening when they have ease and quietness to digest.

Secure cellars and all situations exposed to frost. Glaze all your windows and give the old petticoats, hats, and sun-bonnets to the poor, if you have no better use for them.

See that all the youngsters are at school, and attend strictly to its duties. School houses are a better fortification to defend the liberties of our country, than all the walls and cannon of Quebec or Vera Cruz.

See also that the young people make a free use of that valuable provision the Common School Library; and even my adult reader make a proper use of them and other good books during these long evenings yourself.

Be mindful of the poor and suffering, for those that give to the poor *lend* to the Lord; and among other good acts, don't fail to renew your subscription to the Genesee Farmer.

Potato Rot.

Mr. J. Pinneo, of Hanover, N. H., writes to the editor of the Boston Cultivator that it had been remarked in that vicinity that the potato rot did not affect the hills which were planted in the immediate neighborhood of shade trees, though all other parts of the same field were seriously affected with the rot. The inquiry is, how this can be explained?

The editor of the Cultivator seems to think that there is no doubt that shade trees protect potatoes from the rot. He says, "They save the potatoes from the extreme heat of the sun, and they prevent dews from falling on them, thus avoiding the extremes of heat and cold, which are doubtless a principal cause of this malady, especially when the changes are sudden, and the plants are very tender from a luxuriant growth."

If there is any virtue in shade to protect the potato from the rot, it might be well to try the experiment of planting between corn hills, or even every alternate row; although, from our experience, we are not prepared to believe the statement in full—for this year we planted two orchards entirely with potatoes on fall plowed green sward. The apple trees are medium size, set 33 feet apart in one case, and in the other the same with a peach tree between each. They were planted on the 10th to 12th May; they made very little progress in setting tubers, owing to the great drouth, till after the rains, first and second week in August. They were harvested and laid on a barn floor for three or four weeks to dry. In assorting for table use and feeding, about four-fifths of the Mercers had the rot, and a few of the round pink eyes—but the flesh color and merinoes were almost entirely free of the disease. If there is any virtue in shade, this crop had enough of it. The tops were entirely dead nearly a month before any frost.

Many close observers think there is no communication of virus from the leaf and stem to the tuber, but that the vine dies before the maturity of the potato, and they rot as any other immature vegetable production does. The Early June, Kidney, and Ash Leaf, that ripen in July, are not liable to this disease; but they yield only a small crop, and if left till the usual time of digging they are apt to commence a second growth—and if dug when ripe they do not eat well, being kept exposed to the air during the hot weather.

L. Manly.

Monroe County, Nov., 1847.

Meteorology and Meteorological Observations.

BY L. WETHERELL.

Every farmer is interested in Meteorology; and no class of practical men enjoy so good facilities for making observations in this department of science as the farmers. The result of their labor depends mainly upon the favorable or unfavorable workings of the laws of meteorology: if these laws work favorably, the result is, with good husbandry, a plentiful harvest and full barns —if otherwise, the result is a stinted harvest and barns to let. The farmer, knowing this, is led to observe closely the passing seasons, and also to compare the present with the past, in order to calculate results bearing upon the future, which will not only affect his own interest, but the interests of all classes of society.

Now I recommend to every farmer who reads the "Genesee Farmer," to procure for himself a Thermometer, a Barometer, and a Rain Gauge; and that he commence keeping a register of his daily observations made by these instruments, with the exception of the rain gauge—and that he record in this book or register all the important phenomena which occur, such as high winds, aurora borealis, remarkably cold or warm, wet or dry seasons, and their effect upon crops: also the appearance of spring birds, the progress of vegetation, &c., &c. Every farmer would in a few years attach great value to a book of this kind; and so would his children, for they not unfrequently take great interest in this department of useful and interesting knowledge. There is no mystery or difficulty about this, that need deter any one: a little work and much pleasure will be the result of the experiment. Try it, and then recommend it to your neighbor. I speak from experience relative to this matter. I have kept a similar register for more than seven years, and derive no little pleasure and satisfaction from reviewing it occasionally; and it is not the least part of the pleasure afforded me, that I am enabled occasionally, through the medium of the "Farmer," to furnish my brother farmers an opportunity to read by their fire-sides some of the results of these observations.

The mean temperature of the summer months of 1846, was 68.06 degrees—of 1847, 67°.

The amount of rain which fell in 1846, during the summer months, was 11.20 inches—1847, 9.97 inches: difference, 1.23 inches. The rain for the autumn of 1846, 13.16 in.—1847, 12.71: difference in favor of 1846, .45 of an inch.—The number of days on which rain and snow fell in 1846, was 47—1847, 51.

The general opinion prevails that we have had an unusual amount of rain this autumn, but the reader will see that the quantity is less than last autumn; and as it regards the number of days on which rain and snow fell, the difference is slight.

The canal is open; the temperature of the water to-day, 43°. Last year, on the 26th of November, it was frozen, and there were about 6 inches of snow.

There have been several splendid displays of the aurora borealis during the year; the one on the 19th of March was remarkably splendid, and widely observed over our country. The one last evening was very fine. It is very probable that we shall have many such during the winter. It is thought by many that this wonderful phenomenon has an effect upon the weather: how or in what way, or whether at all or not, meteorologists are not agreed.

Rochester, Nov. 26, 1847.

To Correspondents.

Communications have been received, during the past month, from W. A. W., *, L. Manly, C. N. Bement, Wm. Van Dusen, R., N. R. Y., J. Dunham, H., L. Wetherell, A. W. Wheelock, S. Harris, and A. S. Hermon.

During the past season we have received several well written articles on chess, transmutation, &c., but our pages have been too crowded to give them insertion, without omitting more seasonable matter. The same explanation is due to the authors of articles on the potato disease, and various other subjects. We hope to make room, during the winter, for a part if not all of the communications we have on file for publication. Meantime we shall be happy to receive contributions from former correspondents, and all who may be disposed to communicate the results of their observation and experience for the benefit of the agricultural community.

The series of excellent articles on "Hydraulics for Farmers," by C. N. Bement, Esq., are concluded in this number. We shall be pleased to hear from Mr. B. on other subjects.

Notices of several books, pamphlets, &c., recently received, will be given next month.

Cole's American Veterinarian.—As none of our Rochester booksellers have this excellent work, we have obtained a few dozen copies from the publishers,—and can now supply the numerous persons who have recently inquired for it.

Densmore's Straw Cutter.—The reader is referred to an advertisement of this valuable machine, in the advertising department of this number. We shall probably give a figure and description of it in our next.

Sheep.—It is stated that there are one hundred thousand sheep in Addison county, Vermont, which must be driven to other sections of the country to be wintered, or slaughtered. The deficiency of the crop of hay and the ravages of grasshoppers have caused a scarcity of food.

True Farming.---Great Farming on a Small Farm.

A. Macumber, of Spring Port, Cayuga county, has a farm of only 60 acres including two public roads. It was originally covered with oak and hickory trees; the soil a clay loam, with limestone pebbles. He keeps three horses, four cows, and 35 sheep. His crop this year is 652 bushels plump wheat; 150 bushels oats; 5 acres of corn, very stout; 4 acres clover seed; between 30 and 40 tons of hay, and more pasture than can be found on any other farm of the size in the county of Cayuga.

He always sows his corn ground with wheat; first haul off the corn, harrow, then plow, then seed, then harrow again three times, and sow *plenty* of clover seed in the spring. He makes all the straw into manure and puts most of it on his corn ground. The great secret of this man's success, is in keeping his ground covered either with grain crops, or a heavy mat of clover and timothy grass. He considers the exposure of a naked fallow to the sun of July and August, a sort of necessary evil; that the soil, to be kept strong, should be covered.

In addition to barn-yard manure, Mr. Macumber applies plaster, salt, and ashes broad-cast to his crops. He says he was induced by David Thomas to take the Genesee Farmer, many years ago. Although no friend to too many experiments or theories, he is a very decided advocate for the union of science with agriculture, as it is explained by Dr. Lee in the Farmer.

Now I am aware that many farmers who read the foregoing, will say that Macumber must either hire a great deal of *help*, or work very hard himself. Very true; but has he not the product to pay for the labor. He himself avers, that the labor of harvesting and securing his crops is the most formidable part of his farm labor. How much better thus to expend money to harvest and secure crops, than waste money and labor in a tardy, slovenly, ill directed course of farming, which gives no crops to the harvest, or very poor ones.

Such men as A. Macumber are before hand, and in season with all their work; their corn leaves never bleach in a wet season, nor curl in a dry one. They keep no old sward to hybernate worms, the affliction of all lazy farmers, as well as of those who have too many arable acres. They are the favorites of fortune, because fortune delights to favor those only who court her favors. It is in the tact, intelligence, and good will with which they apply their labors, rather than in the labor itself, which enables them to succeed so well! Such men are strangers to that hopeless egotism, which is the curse of all progress—the nurse of self willed ignorance and hoary error.

S. W.

Seneca County, Oct., 1847.

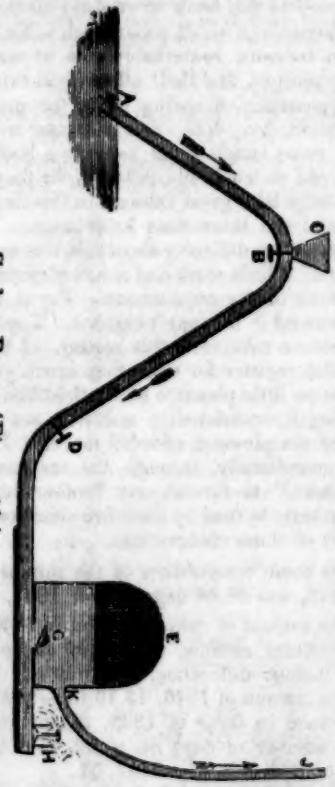
Hydraulics for Farmers.

BY C. N. BEMENT.

NUMBER V.

Syphon Ram.—The following is a description of a Syphon Ram, constructed by H. H. Strawbridge, of New Orleans. Though the principle is quite against our laws of natural philosophy, still facts would seem to contradict theory. It is contended by scientific writers, that the same power might be obtained by making the driving pipe of the same length of the syphon when straightened, and placing the ram further from the head. The question naturally arises, whether there is not less friction in perpendicular than in an inclining tube, by which momentum and power is gained. In the experiment of Mr. Strawbridge, power was gained sufficient to burst his machine, by increasing the height of the syphon.

"A few years ago," says Mr. Strawbridge, in the Farmer's Cabinet, "before these machines had come into use, in the United States, I caused one to be constructed near Covington, La. The fall of water requisite to work it being very small, I continued to increase it by the improvement which I am about to describe.



Syphon Ram. (Figure 10.)

"A B D is a leaden pipe, bent into the form of a syphon and carried over the bough of a tree, the short leg A, B, resting in the pond or spring that feeds the machine, and the longer leg B, D, conducting to and terminating in the machinery itself, which is placed a few inches lower. C, is the funnel connecting with the interior of the syphon through an air-tight three-way water cock B, of the same

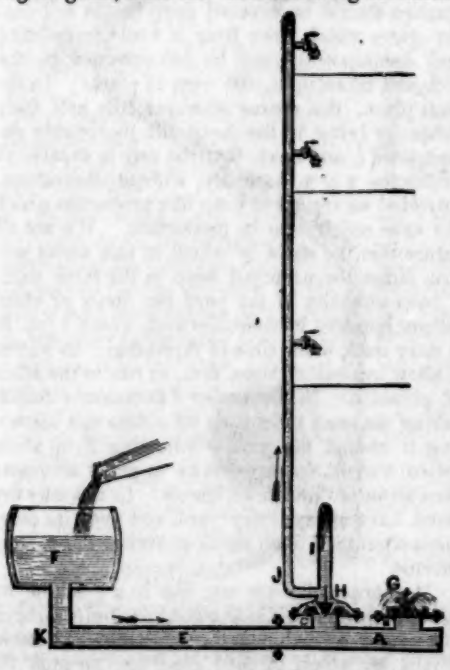
calibre as the syphon itself. At A, under water, and at D, a few inches lower down than the end of the pipe at A, are stop cocks, also the same diameter as the interior of the pipe.

"The cocks A and D being closed, the cock at B is opened so that water poured into the funnel C, will fill both legs of the syphon. This being completely filled, the cock B is turned so as to cut off all communication with the funnel, leaving the syphon still open. The cocks at A and D are then opened simultaneously, when the water begins to enter the short leg of the syphon and descends the leg D in a continued stream, with a force amply sufficient to set the machine in operation.

"In this manner by employing a syphon instead of a straight pipe, conducting from the spring or pond to the ram, a fall six to twelve inches, which would not afford sufficient power to work the ram, may be increased in power so as to equal that of a natural fall of many feet. A fall of one foot or more may be obtained in any situation by partly burying the ram, so as to place it lower than the feeding reservoir; and the escape of the waste water will not impede the working of the valve, for I have made it work at a depth of two feet under water by simply lightening the escape valve at H of a part of its weight. A fall of five or six feet is amply sufficient for all ordinary purposes. This will give a power of fourteen pounds to the square inch, if merely the dead pressure be taken into consideration, but a much greater power if the momentum of the descending column of water be calculated."

"My first machine," continues Mr. S., "was made entirely of wood, including the air vessel, and worked well. But when the syphon was applied and the descending current set the valves in motion, so great was the power obtained that the machine burst with an explosion like that of a swivel. The perpendicular height of the syphon when this experiment was tried, might have been about ten or twelve feet. Another put together more strongly, with cross bolts and rivets of iron withstood the pressure, although the water was forced through the pores of the wood and stood like dew on the outside."

Experimental Ram.—In order to illustrate the capacity or the power of the Hydraulic Ram to raise water at different heights, we give the following diagram, from the 'American Agriculturist.'



Experimental Ram. (Figure 11.)

"The experimental machine we examined," says the editor, "was made by one of our subscribers, as the piece A, of cast iron pipe, 2 inches in the bore, and about 2 feet long, having two flanch nozzles cast on it, B. and C. One end of the pipe was closed, and the other open, with a flanch to connect it about 35 feet of two inch cast or wrought iron pipe E. The other end of the pipe E led to an open water cask, F, placed seven feet above the ram, and this cask was supplied by a hose, at the rate of eight gallons per minute. Of course the fall from the level of the water in the cask, is equal to a fall of seven feet, with a stream giving eight gallons per minute."

The operation of this machine is the same as those before described.

"In the machine we saw, the strokes were seventy each minute, and plainly heard at the distance of one hundred and fifty feet. In the course of two or three minutes the pipe J became full and ran over the top. On measuring the quantity of water which was thus thrown up in twelve minutes, seventy-three feet above the level of the cask, it was found to be four gallons; and as during the twelve minutes ninety-six gallons of water had passed from the water cask into the ram, it appears that it required twenty-three gallons of water to raise one gallon to ten and a half times its own height.

"This experiment was continued and the same quantity of water, four gallons, was thrown up sixty-six feet high in eleven minutes; fifty-three feet high in seven minutes; and forty-two feet high in four minutes. Thus, in the first trial, the machine required twenty-eight gallons of water to throw up four gallons to six times the height of the fall. It would have been easy to have made the head of water, ten, twenty, or thirty feet high, and a series of interesting experiments might be made to ascertain experimentally the relative differences in the momentum of the water descending from a greater or less distance; the fall of seven feet, however, was preferred, in order to give the machines the ability to throw up water to more than ten times the height of the fall, a difference which would not often occur.—Whether a fall of seventy feet instead of seven would have thrown up the same relative quantity of water four hundred and twenty feet is a question we confess we are not able to solve.

"The (driving) pipe E, it is found, must be thirty or forty feet long, or the valve G will not work; almost all the water ran out of it, when the water cask was put directly over the ram. The valve made fifty strokes per minute. It is not necessary to have the pipe E a perfectly straight one, but it may be bent to suit the inequalities of the ground and may even be bent at right angles, as shown in the sketch K. It is far better, though, to have the pipe straighter."

The hydraulic ram when properly constructed, it is said, is not liable to get out of order, or to require repairs; lapse of time or muddy water passing through them may give occasion for trifling repairs, and when these become necessary, the machine can be easily detached from the pipes and carried in one hand for convenient repairing. It is also said that the height to which one of these machines can raise water is limited only by the power of valves and pipes to resist the pressure. A moderate sized one has been made to send water to a perpendicular height of three hundred feet. On this principle, works have been erected at Marley, France, which raised water in a continuous stream to the height of one hundred and eighty-seven feet. Indeed a ram has been made in England, to raise one hundred hogsheads of water to a perpendicular height of one hundred and thirty-four feet in twenty-four hours, with a head of only four and a half feet.

There are two rules for ascertaining how much a given stream of water will raise. First, find how many times higher the water is to be

raised than the fall of the driving power; then the adding an 0 to the number and dividing by 7, you can ascertain the number of gallons that will be required to force up a single gallon of water.

Second, "measure the amount of water discharged by the stream in a given time. Ascertain the greatest amount of head or fall that can be obtained, and the elevation to which the water is to be raised. Then divide the elevation by the head or fall, and the amount of water by the quotient. Deduct 30 per cent. from this result and it will give the amount delivered in the given time. For example, suppose an elevation of sixty feet, with a fall of five feet. The supply four gallons per minute, or five thousand seven hundred and sixty gallons per day.

Then 5)60= 12; then 12—5760= 480; deduct 30 per cent., which leaves 336 gallons per day.

If the machine is properly made and put up, it is said this rule may be depended on."

In a letter from Mr. Birkinbine, we are advised that one of his rams is now in operation, rising with a two-inch supply pipe B, over five thousand gallons of water per day, thirty feet high.

The simplicity of the machine and its operation, proves its effectiveness as well as its durability, and shows the very small amount of attention and repairs it will require to keep it in order. The ram and pipes should of course be laid under ground, beyond the reach of frost.

The very small expense of a ram, and pipes necessary to work it, being in most cases less than that of a wheel and pump, are strong inducements to adopt it in preference.

Removing Sheep Manure.

Mr. Editor:—Having been a highly interested reader as well as a subscriber to the "Farmer," for several years, I am bold to say that its contents of truth and undeniable good sense have satisfied me beyond a doubt that I have not "paid too much for my whistle." Frequently the knowledge of some simple fact alone, from the pen of a practical farmer, has proved of such paramount importance to my success, that I am sure my fifty cents have been replaced tenfold.

Permit me through your paper to make known to my brethren a convenient mode of getting out sheep manure. We all know that that kind of manure is so dry, hard, and crusty, generally, that it is more difficult forking and pulling apart than any other. When ready to commence loading take an old axe that is not too dull and chop parallel lines across the pile about one foot asunder; then turn and cut at right angles, making squares about one foot in size, which may then be peeled off at any desired thickness and weight, according to the strength of the laborer.

J. Dunham.

Etna, Tomp. Co., N. Y., 1847.

Saving and Application of Manure.

Mr. Editor:—In the last number of the Farmer I observed an article under the head of "How should manure be applied to land," which is pronounced a new theory. Perhaps Mr. Underhill's theory may be new with many, at least scientifically; but it is by no means an untried theory in this Western New York among practical farmers. The old theory that manures lose their properties by leaching and running deep into the earth, especially in our good wheat soils, has always looked to me to be incorrect, and one which my experience has fully proved to be so. In all of our good wheat lands the subsoil contains so large a portion of clay that water is very slow to penetrate it, while the gasses and salts imparted by fermentation of manures are always rising to the surface. There is perhaps no branch of farming which is more injudiciously managed than the saving and application of manures, and certainly there is no one thing so vastly important to the farmer's prosperity as that of manuring and keeping the soil rich.

Every farmer has, or at least should have, a theory or system which he follows in all his operations in business; and being myself desirous always of hearing and learning the views and practices of others who follow the same calling as myself, I take the liberty of giving to you my theory and experience in the use of farm manure. In the first place my theory is, that yard manure should be covered deep in the soil that the gases which arise from it while fermenting and decomposing may be incorporated in the soil, and taken up by the roots of plants. In the next place, that coarse manures lose half their value by lying in the heap till thoroughly decomposed; and next, that the soil is capable of producing a crop annually, without diminution, provided we restore to it the like properties which the crop requires in its production. We are all aware that the straw of wheat in this wheat section forms the principal heap in the farm yard. I have annually in my yard the straw of about fifteen hundred bushels of wheat, which I put in a snug stack at the time of threshing. In winter I allow my cattle, hogs, &c., to run to the stack at pleasure. In December I commence demolishing the stack by cutting off a slice and scattering it around the yard—following it up about twice a week, in proportions to get it all under foot about the middle of March. In this way my stock have always a dry yard, and need no other protection than open sheds to shelter them from storms.

My corn stalks are cut fine in a machine by horse power and fed in troughs, sparingly, through the winter—which, together with the straw stack, keeps my stock in good condition through the winter till warm weather begins, when a little hay carries them through in fine condition. My

manure heap, you will perceive, is then well wet down by rains and snows which fall at intervals, while the straw is being spread over the yard, and, interspersed with the excrements of the cattle, is ready about the last week in April or first of May to cart to the field designed for it, which I do at the rate of about thirty or forty cart loads (according to the condition of the land,) to the acre. I then commence spreading and plowing, turning the manure under about ten inches deep, taking care not to have it spread faster than just to accommodate the plow, to avoid drying up by the sun and wind. It is sometimes necessary to have a man follow the plow with a a rake to draw the manure into the furrow to prevent clogging the plow. When this is done, and rightly done, I roll down the furrows, harrow well and plant to corn—planting an early kind that it may be ready to harvest by the middle of September; which latter is done by cutting up at the ground and drawing off. The ground is then plowed and sown to wheat about the 20th of the month. This I count as good as a naked fallow, and frequently turns out better, while the corn crop is much benefitted and no value of the manure for the wheat crop lost.

Yours, R.

Sweden, N. Y., Nov., 1847.

Ashes on Corn.---An Experiment.

Mr. Editor:—Last spring, after I planted, I took what ashes I had saved during the last year, and put on my corn, at the rate of about 3½ bushels to the acre. In a part of the field which was as near like the rest as possible, I left two rows which I did not ash. The soil was light—a sandy loam on a hard-pan bottom—in many places not more than 6 inches deep. The effect of the ashes was so plain that it could be observed 60 rods off.

On harvesting I cut up the two rows which were not ashed (or twenty rods of them,) and set them apart from the others in stouts; and then I cut up two rows of the same length, on each side, which had been ashed, and set them by themselves. On husking, the following was the result:

No. 1. The two rows, ashed, on the west side, gave of corn in the ear, 207¼ lbs. No. 2. The 2 rows not ashed, gave 166½ lbs. No. 3. Two rows on the east side, ashed, gave 205 lbs.

I then sorted each lot and the difference was still greater. No. 1 had of pig, or soft corn, 29¼ lbs. No. 2 had 45½ lbs. No. 3 had 27½ lbs.—Thus leaving of merchantable corn in the ear—No. 1—178 lbs.; No. 2—121 lbs.; No. 3—177½ lbs.

I then measured off an acre, and made a calculation upon it, after having weighed one bushel of ears of merchantable corn, (which weighed 42 lbs.,) and the result would be as follows, per acre: No. 1—72 bushels and 2 lbs.; No. 2—48 bushels and 41 lbs.; No. 3—72 bushels and 1½ lbs.

Thus you will perceive that where I had ashed I have 23 bushels more of ears of merchantable corn per acre, than where I did not; and hence, on the 5 acres, the grain was 115 bushels. Beside I think I had one-fourth more of corn fodder where the crop was ashed—and all for 17½ bushels of ashes.

Yours, &c., Wm. Van Dusen.

East Barry, N. Y., Nov., 1847.

Remarks.—We thank Mr. V. D. for the above. It is another conclusive evidence of the great benefit of ashes as a manure; and we trust the result of the experiment, so accurately and briefly given, will prove valuable to many of our readers.

Shrinking of Pork.

Mr. Editor:—Can you, or any of your correspondents, give the correct reason, or the remedy, or both, for the "skrinking of pork," when boiled in summer? I have heard several reasons assigned, but none of them are satisfactory. Some have ascribed it to the influence of the moon, but of this I have no evidence. Others say, that if the animal be killed when his appetite is good, when he feeds well, and is consequently in a thrifty, growing state, his flesh will not shrink when boiled. But this is contrary to my experience. I always kill at such times, and yet my pork shrinks. Others say, that if the animal be long fatted, so as to give his flesh time to become firm, &c., the pork will not shrink. This too is contrary both to observation and experience.

My father always commenced feeding his hogs as early as the latter part of August, and continued the operation till near the first of January, (about four months,) supplying them plentifully with peas, boiled potatoes, and, for the last five or six weeks, corn; and yet he always complained of the shrinking of his pork. In regard to myself, I have always been troubled in the same way, except the first one or two years, when my casks were new; and then my pork was all that I could wish. I have ever since managed in the same way, but not with the same results. I have sometimes thought that the casks, (which are made of oak,) become unfit for use, after the first or second year.

Any information that you, or any of your subscribers, can give, through the Farmer, will be gratefully received. H.

Fairport, Nov. 1, 1847.

Iron-water for Fowls.—A writer in the English Agricultural Gazette, recommends that a piece of steel be kept constantly in the water to which fowls have access. Iron-rust, he says, is an excellent tonic. A roll of brimstone is also recommended to be kept in the water.

Genesee County Fair.

Mr. Editor:—The Show and Fair of the Genesee county Agricultural Society came off on Thursday and Friday last; and although it rained almost constantly, and the roads very bad, there was a turn out equal to any Fair ever held in this county. The horned cattle exhibited would number about 175 head. As a lot, they were said to be first rate. There were many full blood Devons—not one full blood Durham. There were about 400 sheep on the ground, nearly all fine wooled, showing a most decided improvement from the first exhibitions of this Society. The show of stallions, working horses, mares and colts, was good—in some respects better than former exhibitions. Swine were scarce, the male part only having two representatives on the ground. The farm implements exhibited were few, but so far as Cultivators and Plows were concerned we think would be hard to beat. The domestic manufactures spread out in Stage's long room, on the 7th, afford convincing proof that the *women* of this county are determined to do their part towards sustaining our Society.

The receipts of the Society, during the first day, amounted to about $126. Nearly half of this amount was paid by the *village* of Batavia. This shows that the farmers of this county are wofully remiss in contributing their money to the support of the Society—a fact which I am ashamed to state, yet it is a truth. A farmer unwilling to contribute fifty cents a year for the support of an Institution which tends directly to enhance the value of every thing which he possesses! Who can believe it? Yet who can disbelieve it when we see it all? There are many men in this county who have had more to say, either in finding fault with, or directing the movements of this Society, than any officer in it; still they have not been members these two years—not having paid their fifty cents, which is necessary to entitle them to membership.—What, men who imagine themselves first in society where they live, who have been honored with seats in our legislative halls, not ready to pay fifty cents per annum for the support of an Agricultural Society! These men are even a thousand times more ready to pour out the addled contents of their heads, than the shining contents of their purses. "Know thyself." I would that these men did know themselves; for I am satisfied that a little better self-acquaintance would cause them to act very differently on such occasions.

I do not wish to be uncharitable, but these reflections, and many more, force themselves upon me when I review the scenes of the 7th and 8th. But I hope we shall see a different state of things before long; if not, it will soon be up hill business for the few who now contribute their means for the support of the Society. But *it must be supported*. This, and all institutions of a like tendency, must continue their onward march, till the Agriculturist shall occupy the position that God designed he should occupy—the highest in the scale of intellectual, moral, and physical worth.

But I am digressing from my subject. There was an interesting trial of skill with the plow. There were thirteen teams entered, and the laudable spirit of emulation manifested is certainly worthy of all commendation. The work was done in fine order and every thing passed off agreeably. We had an excellent and instructive Address from Ambrose Stevens, Esq.—and elected James B. Todd, of Byron, President; Samuel Heston, Secretary, and Henry Morrell, Treasurer. Yours,

Batavia, Oct. 10, 1847. Spectator.

Remarks.—Although the above article may be considered somewhat severe yet all who know the difficulty of properly sustaining agricultural societies will admit its truth and justice. Many of the remarks of "Spectator" will apply with equal force to other counties and sections, as well as Genesee. It is a humiliating fact, that so many farmers are unwilling to contribute to the support of societies which benefit themselves and neighbors, unless they are quite sure of an immediate profit—premium—in return for the trifling amount of their membership.

Butter Making.---Inquiries.

Mr. Editor:—By request of a subscriber and butter dairyman, the following questions are proposed for the benefit of butter makers, viz: Can more butter be made from churning the milk entire than from setting the same and churning the cream?—and if so, at what temperature, (Fahrenheit,) and how long after milking should it stand before churning? If from the cream, at what temperature should the room be kept in which the milk is set? Likewise whether butter can be kept better under water by sinking the firkins than above the water? Also in setting milk what depth of milk in the pans is best calculated to yield the most butter? In all of the above, the best quality of butter is to be considered.

By giving information on the above questions through your valuable paper, you will confer a great favor to many a *young*, and perhaps to some *old farmers*. Yours with respect,

S. E. S. H. Nott, M. D.

Hamburgh, Erie Co., N. Y.

Remarks.—Many of the above questions have already been discussed in this journal. We shall, however, be happy to give place to a communication, answering them definitely—and hope to receive such from an experienced butter maker. Who will furnish the information desired?

Bloody Milk, &c.

Mr. Editor :—Two years ago this fall, I had four very fine milch cows. To keep them in good heart late in the fall, I fed them for several days with the loose cabbage from the garden.—They soon after commenced giving bloody milk, so bad that the whole was given to the pigs. I used various medicines and anointed their bags with the garget ointment, but with no benefit; and thus they went on, to my great alarm, until all of my cabbage was fed out, when they immediately recovered their usual state.

And what, Mr. Editor, do you think was the cause of this appearance of their milk. Why, sir, it was as simple "as the road to parish church," when once found out. Among my cabbage was a considerable quantity of the red variety which had headed badly, as they usualy do, and this was the sole and only cause of my bloody milk—to my great discomfiture and joy of the pigs.

It is a well ascertained fact that cattle that eat the madder root have their entire horns dyed a bright red, and so perfectly, that they retain the color after being worked into toys, &c.

In a town in which I once resided, the village butcher killed a very fat young steer, which not being an every day occurrence, the whole population was agog for a steak, or a roast; and in a very short time the whole town sent up the odor of beef steak and onions—houses were scented from the kitchen to the garret, where the beef was cooking. It was an effluvia compounded of garlic, or leeks and assafœtida, at once nauseous and disagreeable, and before noon every pound was returned on the butcher's hands. He prosecuted the farmer from whom he purchased the creature, for selling unwholesome meat, and it ended in a tedious law suit; but before it was through with, the facts came out, that the animal, on the night before the day on which it was killed, broke into a yard where a quantity of onions had been topped and ate a large amount of the green tops. The butcher of course recovered damages.

These statements are true and may add a mite to our general stock of knowledge, and prove interesting to your readers. N. R. Y.

Monroe County, Nov., 1847.

How to Toast Cheese.—Toasted cheese is much relished by some persons, but it is seldom well prepared. The following directions are said to come from a gentleman who prides himself on his "goostful" appetite. Cut the cheese into slices of moderate thickness and put them into a tinned saucepan, with a little butter and cream. Simmer very gently until quite dissolved. Remove it from the fire, allow it to cool a little, and add some yolk of egg, well beaten; and then make it into convenient shape, brown it before the fire, and eat while it is warm.—*Ex.*

Curing Hams and Pork.

After dressing, the carcass should be allowed to hang till perfectly drained and cool, when it may be cut up and salted. The usual way is to pack the pork in clean salt, adding brine to the barrel when filled. But it may be dry salted, by rubbing it in thoroughly on every side of each piece, with a strong leather rubber, firmly secured in the palm of the right hand. The pieces are then thrown into heaps and sprinkled with salt, and occasionally turned till cured; or it may at once be packed in dry casks, which are occasionally rolled to bring the salt into contact with every part. *Hams and shoulders* may be cured in the same manner, either dry or in pickle, but with differently arranged materials. The following is a good pickle for 200 lbs. Take 14 lbs. of Turk Island salt; ½ lb. of salt petre; 2 qts. of molasses, or 4 lbs. of brown sugar, with water enough to dissolve them. Bring the liquor to the scalding point, and skim off all the impurities which rise to the top. When cold, pour it upon the ham, which should be perfectly cool but not frozen, and closely packed; and if not sufficient to cover it, add enough pure water for this purpose. Some extensive packers in Cincinnati and elsewhere, who send choice hams to market, add pepper, allspice, cinnamon, nutmegs or mace and cloves. The hams may remain six to eight weeks in the pickle, then hung up in the smoke-house, with the small end down, and smoked from 10 to 20 days, according to the quantity of smoke. The fire should not be near enough to heat the hams. In Holland and Westphalia, the fire is made in the cellar, and the smoke carried by a flue into a cool dry chamber. This is undoubtedly the best method of smoking. The hams should at all times be dry and cool, or their flavor will suffer. Green sugar-maple chips are best for smoke; next to them are hickory, sweet birch, corn cobs, white ash, or beech.—The smoke house is the best place to keep hams till wanted. If removed, they should be kept cool, dry, and free from flies. A canvass cover for each, saturated with lime, which may be put on with a white-wash brush, is a perfect protection against flies. When not to be kept long, they may be packed in dry salt, or even in sweet brine without injury. A common method is to pack in dry oats, baked saw-dust, &c.—*Allen's Agriculture.*

Vinegar.—A correspondent in the Ohio Cultivator asks how to transform old cider into vinegar? Make it run through a barrel of clean wood shavings by a small stream trickling over a large surface. Cider, or whiskey diluted, can be made into good vinegar in 48 hours.

The Chinese call going to law, "losing a cow to win a cat." With us it is often losing of the cow without a winning of the cat.

Matters in Central N. Y.---Cheese Making.

Messrs. Editors:—I came from Buffalo to Utica last week on the railroad, over as rough a raod as any man would wish to travel on. The timbers are decaying, and the iron is a flat rail, and so light as to be frequently starting off from the bed pieces; and it requires a man of some nerve, who knows the danger, to ride with perfect composure. They are beginning to lay the road anew with heavy T rail, which carries the cars very smoothly, and on which they run with more speed and safety.

The Legislature have passed an act requiring the whole line of road from Buffalo to Albany to be laid with the T rail, previous to the first of January, 1849.

They call the wheat crop in Western New York, a fair crop; but it looks very light on the line of the railroad from Buffalo to Rochester, and the oat crop is hardly worth cutting; east of Rochester to Utica the oat crop looks better, and the corn bids fair for a heavy yield. I never saw the trees so loaded with apples as they are this year every where, but they are small sized.

I called on one of your subscribers, who lives near Utica, Mr. B. F. Jewett. His farm is cultivated for hay mostly; and every nook and corner, dry land and wet, is made productive. His wet land he makes tillable, by digging ditches from 2 to 3 feet deep, and laying two scantlings in the bottom, 5 or 6 inches apart, and covering them with a slab. He then throws the surface dirt in the bottom, and levels up with the subsoil on the top.

Herkimer county is the greatest cheese county in the State, and probably in the United States. Almost every man who has land enough keeps cows and makes cheese. They have some important improvements, that every man should know who makes cheese to any extent any where. One of the most useful articles I will undertake to describe. It is a tin vat. The first one I saw belongs to John Everett, Esq., of Litchfield. It is made of tin, 2½ feet wide, 6 feet long, and 19 inches deep. This vat sets inside of a wooden vat, 4 inches larger than the tin vat, which leaves a space of 2 inches between the vats—so that the tin can be surrounded with water. Mr. Everett has 30 cows. At night he fills the outside vat with cold water; this surrounds and chills the tin vat; the milk is then strained into the tin vat, and is chilled and kept from souring before morning. In the morning the milk is strained in with the night's, and then with a small boiler steam is introduced into the water between the vats, until the milk is heated to about 84°, which is ascertained by a thermometer.—They then put in the rennet, and as soon as the curd has set they break it up, and then introduce the steam as before to scald the curd, which they heat to 104°; they then elevate one end of the vat a little and take a plug out of the lower end, and set in a tin strainer; the whey then runs off, while they stir and break up the curd. The whey is conducted from the vat to the cow barn, in a small trough, and is then fed to the cows. Most cows eat it greedily, and they think it is a greater benefit to feed it to cows than to hogs. The cheese from this dairy weigh from 60 to 90 pounds, and is marketed to be delivered on the canal monthly, at 6¼ cents.

I also visited the dairy of Rodney Wilcox, in the same neighborhood, who has 70 cows. He pursues nearly the same method in making his cheese, and says the labor of making a cheese from his 70 cows, with his tin vat and steaming apparatus, is not much more than it formerly was to make a cheese from the milk of a dozen cows. He advocates hard pressing, and says you cannot press too hard, or get the whey out too quick; that he gets about all the whey out in 20 minutes, but it stands in the press 24 hours. His cheese weigh from 150 to 220 lbs. He has marketed them to be delivered in the fall at 7 cents in boxes.—*Prairie Farmer.* John Gage.

Litchfield, N. Y., Sept., 1847.

Browse for Sheep.—Browse of various kinds is good for sheep in winter. They are very fond of it, as it affords a change, being a green food. The browse of oak, and other powerful astringents should be avoided. The browse of evergreens is used, not only as a wholesome food, but for its medicinal qualities, particularly pine and hemlock. And in some cases it is used to considerable extent as a substitute for other fodder. Pine and hemlock are best, but spruce and fir are also good.

Some farmers have nearly supported their sheep on browse for months, when hay was scarce. J. Whitman, of Turner, Maine, has used pine and hemlock for his sheep for more than forty years, and he has known no injury from them, but a benefit, and a saving of hay.—He says that hemlock does not injure sheep with lambs. He prefers pine and hemlock boughs to spruce and fir.—*Cole's Veterinarian.*

Income from Poultry.—It is stated in the report of the committee on fowls, made at the last Worcester (Mass.) Cattle Show, that Eben Lincoln, of Grafton, from 27 fowls, in seven months, obtained 199 doz. eggs, which sold for $28; and 92 chickens sold for $23; total, $51—besides 29 dox. eggs used in his family. The food of the fowls was, "some meat, some fish, all kinds of grain, some lime, or pounded shells, enough sand and water, a warm dwelling, and good roosts." Reckoning the 29 doz. eggs which were used in the family at 14 cents. per dozen, (the price which those sold brought,) the whole income from these 27 fowls in seven months, would be a fraction over $55.—*Cult.*

Mode of Cleaning Wheat for Seed.

As the wheat crop this season is unusually foul, abounding in chess and cockle, I will, with your permission, make known to the readers of your paper a plan I have adopted for cleaning my wheat for several years past with much success.

After passing the wheat once through the wind mill in the ordinary way, take a common newspaper of good quality and place it double over two-thirds of the surface of the fine riddle, leaving one-third or about four inches of the front side uncovered. One good tough paper will last long enough to clean 100 bushels if the grain is not damp.

The operation is as follows:—The grain on falling through the coarse riddle on to the paper, accumulates a certain quantity before it will begin to fall over the margin of the paper; by this means the cockle is carried forward so as to fall on front of the screen, and thus have a chance to run the length of it, and is more likely to fall through, and the chess and white gaps, being lighter than the wheat, as they fall over the margin of the paper are mostly blown out in front of the mill, and the chess that is not blown out runs the whole length of the screen and seldom escapes falling through. Care must be taken to give the riddle its proper inclination, and the mill must stand level, so that the grain will fall evenly over the margin of the paper.

To farmers whose grain is foul, I would say, clean your wheat for seed twice or thrice according to the above plan and if there is still an occasional grain of cockle in it, pass through your fields next summer when the plant is in blossom and a little labor will eradicate it.—*Ohio Cult.*

Animal Food for Swine.—There cannot be a doubt but these are highly fattening in their nature and also that swine, being somewhat allied to the carnivora, will greedily devour them; but the question is, do they not tend to make the flesh strong and rank, to inflame the blood, to create in the animals a longing for more of such food, and thus lead them to destroy fowls, rabbits, ducks, and even the litters of their companions? Many will give blood, entrails, scraps of refuse meat, horse flesh, and such like to swine, but we should decidedly discourage such practices; the nearest approach to animal food we would admit, should be pot-liquor and dairy refuse. Animal food is bad for every kind of swine, and tends to make them savage and feverish, and often lays the foundation of serious inflammation in the intestines.—*Youatt on the Pig.*

Kindness.—No man hath measured the power of kindness, for it is boundless: no man hath seen its death, for it is eternal. In all ages of the world, in every clime, among every kind, it hath shone out a bright and beautiful star—a beaming glory.

Wool.—The history of the growth of wool is very curious. Fifty years ago not a pound of fine wool was raised in the United States, in Great Britain, or any other country except Spain. In the latter, the flocks were owned exclusively by the nobility or the crown. In 1764, a small flock was sent to the elector of Saxony, as a present from the King of Spain, whence the entire product of Saxon wool, now of such immense value. Before the breaking out of the last war between this country and Great Britain, Colonel Humphreys succeeded in getting a few merino sheep brought out of Spain; then their exportation was prohibited under penalty of being sent to the galleys for life.

In 1809, during the second invasion of Spain by the French, some of the valuable crown flocks were sold to raise money. Our Consul at Lisbon, Mr. Jarvis, purchased fourteen hundred head, and sent them to this country. Previously, however, Mr. Livingston obtained a few sheep of the Spanish breed, as a present, in 1792. A portion of the pure unmixed merino blood of these flocks is to be found in Vermont at this time. Such was the origin of the immense flocks of fine-wooled sheep in the United States and Great Britain.—*Selected.*

Harvests without Previous Sowing.—In the Schnellpost we find an account of a method of compelling the wheat plant to become perennial, like grass, and to perfect its grains annually without the yearly sowing of seed, which has been successfully practised at Constance, in Germany. It was discovered by a steward of an estate named Kern. His method, after plowing and manuring the land and sowing it with summer or winter wheat, is, to mow it in the spring before the ear makes its appearance. This process is repeated several times in the season, and the product is used as hay. The plant is then allowed to grow and be cut in the ordinary manner. The next year it ripens earlier and bears more abundantly than wheat treated in the ordinary manner; from one field four successive harvests have been gathered.—*Agriculturist.*

Importance of Deep Tillage.—However skillfully and philosophically we may carry on our saving and application of manures; however well we may select our seed, and choose our seed-time, without deep tillage we can by no means receive the maximum result. Drained land, deeply stirred, and thoroughly pulverized, becomes a kind of regulator of the weather for itself; it is not soon soaked in wet, and it forms a store house of moisture in dry weather. It is a bad conductor of heat, and is therefore not easily over-heated; but on the other hand it is not soon cooled, and so keeps up an equal temperature by night and by day, in cloud and in sunshine, in the highest degree favorable to the healthy development of plants.—*Farmers Herald.*

HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

Insects.

Among the multifarious obstacles against which the cultivator of the soil has to contend, none are more vexatious or more annoying than *destructive insects*. Excesses of rain and of drouth, of heat and of cold, hurricanes and hail storms, pass along leaving ruin in their track. Their effects are soon outgrown and forgotten, but *Insects* are perpetually knawing and blighting from the opening of the fruit bud until the return of winter—preying alike on the germ of vegetable existence beneath the surface of the soil and the full grown tree that has outlived several generations of men.

Nothing can illustrate more forcibly the mysteriousness of the designs of Providence, than the fact that a tiny insect, too small for the discernment of the human eye, can completely baffle the power and intelligence of men. But feeble and fruitless as our most earnest and best directed efforts may, in many cases, be, we must not fall back or despair; on the contrary we must go on, *persevere*—that is the word—availing ourselves of all the aid that the sun light of science, and the practical details of experience, may shed on our path.

What we wish to direct attention to now is that a vast deal may be done towards the destruction of insects while in their winter abodes. They burrow either in the soil, among fallen leaves or rubbish, or have woven themselves nests on the bodies and branches of trees, in forks of limbs or crevices of the bark; fallen fruit, too, are usually tenanted by them.

Now what is there in our power to do? Why, we can dig and throw up the soil of our gardens in such a way as to expose it as much as possible to the influence of frost. Around our fruit trees we can do the same. We can gather and burn or place in a fermenting heap, where all insect life will be destroyed, all fallen leaves, stems of annual plants, &c. We can examine every tree on our premises carefully, and remove all nests that have been woven in them during the past season; every crack and crevice in the bark from the base to the top should be visited with all possible minuteness, and their sly tenants dislodged. Scraping and washing should also be done in season. All this we can do, and we know from experience and numerous examples we have met with, that such labor does not fail to receive its reward, while its neglect will be sure to incur many a weary hour of unavailing labor next summer, and many a sad disappointment.

Remember that the man who allows insects to revel and multiply at pleasure in his garden and orchard is no less a nuisance than he who grows a field of thistles to sow his entire neighborhood with. There should be a law imposing a severe and equal penalty on both; but we trust that the general growth of taste and improved culture will render such laws unnecessary.

New American Seedling Cherries.

The past year has brought to notice several new and valuable seedling Cherries. No less than *seven varieties*, originated by Prof. Kirtland, of Cleveland, O., have already been noticed in the Horticulturist and other journals.—Several of these we *know* to be excellent, as we saw and tasted them last summer—though too late to see them all. We shall give a description of some of them soon.

Dr. Herman Wendell, of Albany, a distinguished amateur horticulturist, has fruited a seedling of his own raising, said to be very beautiful and of excellent quality. It is named

WENDELL'S MOTTLED BIGARREAU.

We find a handsome, colored, steel engraving of it in the "American Journal of Agriculture and Science." It has also been been described in Hovey's Magazine, and the Horticulturist.—

The following description we take from the latter journal:—"It is of large size, regular obtuse heart-shaped; dark purplish red, becoming nearly black at full maturity, and mottled with small dark streaks or points; suture marked with a dark line half way round. Stalk of moderate length, set in a round and regular depression. Flesh firm, crisp, well flavored, and the pits small. Ripens about the season of Downer's Red."

This cannot but prove a desirable addition to the list of cherries. Originating in Albany, it must be hardy—and coming to maturity when most of the better varieties are gone, will render its possession a desideratum.

Coe's Transparent.—This is a new seedling raised in the interior of Connecticut, to which the highest character has been given.—The *Horticulturist* says that "it is undoubtedly, with the exception of Downer's Late, the finest American cherry we have yet tasted. Its merits appear to be, first, earliness—the season of its maturity being just before that of the Black Tartarian; second, unusual beauty of appearance and delicacy of flavor; third, great hardiness and productiveness."

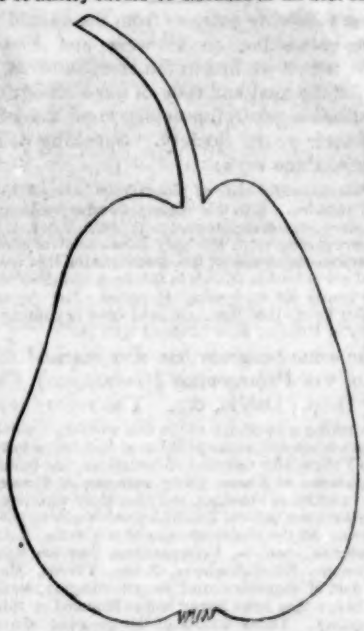
Coming nearer home we have a fine seedling raised by our friend Zera Burr, of Perrinton, which has been exhibited for two years past at our Horticultural shows. Our absence last year in the cherry season prevented us from seeing it in bearing, and forming a decided opinion as to its merits over other varieties of the same season. We shall do so next season, however, if circumstances permit. From what we have seen and heard of it, we shall be mistaken if it does not prove equal to most of the new varieties lately introduced.

The fact that, in one season, we have over a dozen new seedling cherries named and introduced, leads us to anticipate a rapid extension of our list. We trust, however, that every precaution will be taken, in the proper quarters, to exclude every one that does not bring with it distinctness of character and undoubted superiority. Otherwise we shall get flooded with an endless variety of very ordinary cherries—people are so partial to, and inclined to over estimate, their own productions.

The Washington Pear.

This is an American seedling of undoubted excellence; indeed, from what we have seen of it we think it very rarely surpassed. We have eaten specimens grown the past season in Western New York, that, to our taste, were quite as delicious as a first rate *Seckel* or *White Doyenne*. It possesses, too, much distinctness of character, from its peculiarly oval form and prominent red spots on the sunny side. Its history is correctly given, as follows, by Landreth:

"The Washington Pear is a seedling discovered in a hedge row on the estate of Col. Robinson of Naaman's Creek, Delaware, some forty-eight or fifty years ago. We are informed by our friend, Dr. Thompson of Wilmington, that the tree still stands, vigorous and healthy, producing from 14 to 16 bushels of fruit annually. Dr. T. says: 'So far as my recollection of it goes, it has never suffered from disease or been attacked by blight, and I have never known the fruit of the original tree or one of its descendants by budding or grafting to crack as does the fruit of the old Beurre or Butter.' Dr. T. adds—'Delaware has some State pride in this pear, as Pennsylvania has in her fine Seckel, than both of which I have yet to see their superiors among autumn pears.' In the opinion of some competent judges he might have gone a little farther and said their equals, and yet from some unaccountable cause, the Washington is comparatively unknown—Coxe does not even name it in his 'View of the Cultivation of Fruits,' published in 1817; and Kenrick, from the notice of it in his "Orchardist" had evidently never seen it. Downing has several typographical errors in his description; that portion destined to be history should be amended in his next edition."



(Fig. 66.) *Washington Pear.*

It may be described as follows: *Size*, medium; *form*, oval or rather long obovate—quite regular and uniform. *Stalk* pretty long, over an inch, usually somewhat curved and in a very slight depression—frequently a little fleshy ring around the base. *Calyx* small, open in a shallow basin. *Skin* bright lemon, yellow at maturity, sprinkled with small brown dots, and frequently with a ruddy cheek, and mottled with distinct red spots on the sunny side. *Flesh*, like the White Doyenne, white fine grained, buttery and melting. Flavor delicious. Ripe during the last half of September—but frequently continuing, here, through the first two weeks of October. In Pennsylvania and Delaware it ripens in August and lasts till September. We noticed during the past season that there is nearly a month of difference in the ripening of fruits between Philadelphia and Western New York.

Last autumn there was a pear sold in the Rochester market, for several weeks by the fruit sellers, as the *Washington*, from Perrinton we believe. It was oblong and yellow like the Washington, with *small* red dots on the sunny side, but was uniformerly larger, and more swollen around the stem which was shorter. The flesh is coarser and deficient in juice. Although of tolerable quality and very showy and saleable on the street, it still is so inferior to the Washington as to be unworthy of even a comparison.

A sensible man finds no real pleasure in consolation—he seeks forgetfulness.

Buffalo Horticultural Society.

The following extracts from the annual report of the committee on Flowers and Flowering Plants, which we find in the Horticulturist, speak well for the zeal and taste of our Buffalo friends, and afford a gratifying evidence of the efficiency of their young Society. Speaking of Roses, the committee says:

"This delightful class of plants have astonishingly multiplied with us. Ere this society became existant, three years since, the common garden or June Roses, with very rare exceptions, were the only Roses known here. The present season, however, has demonstrated that we are not behind our suburban friends in this beautiful class of plants: all, or nearly all the leading *Perpetual, Tea, Noisette,* and *Bourbon* Roses that have attained celebrity either in this country or Europe, have bloomed with us."

The same progress has also marked the culture of the *Pelargonium* (Geranium,) *Fuschia,* (Ear Drop,) Dahlia, &c. The report says:

"In taking a summary of the five monthly Exhibitions of the season, we find enumerated as shown, some forty varieties of Tulips, fifty varieties of carnations, one hundred and fifty varieties of Roses, thirty varieties of Pansies, over thirty varieties of Fuschias, and over sixty varieties of Dahlias, with some several hundred green-house or pot plants, embracing all the choice specimens of Cactus, Achimenes, Calceolarias, Azaleas, Pelargoniums, Nereum Splendens, Penstemons, Rhododendrons, Roses, Yuccas, Magnolias, &c. And of Annuals a most gorgeous display, embracing a great many that have never before bloomed in this part of the country. These results of the progress of our infant Society are truly gratifying to your committee, as evidencing a rapid, discriminating taste and skill in Floriculture, alike creditable to ourselves and to the city generally, and may be taken as an earnest of our future efforts for the propagation of this truly delightful and social, refining, *rationale* of intelligent society."

The Red Canada Apple.

The apple which bears this name was introduced into Western New York some years ago, from Canada, without a name, and this name was given it. We believed all along that it was some old English sort, and hence have abstained from noticing it as a *new* fruit, as we have been repeatedly urged to do.

Several eastern pomologists have said that it was the old Nonsuch; but as the color was much brighter, flesh more firm and crisp, and the size usually larger than we had seen the Nonsuch, we doubted their being identical. Recently, however, we have received specimens of Nonsuch from S. W. Cole, Esq., of Boston, and from a critical comparison, we are forced to believe them the same. Those grown here are much superior in quality, and more bright and beautiful in appearance. Mr. Cole believes them to be identical.

This fact, however, though clearly established, does not impair the estimable qualities of the fruit. Whatever it may be elsewhere, here it is one of the very best winter apples known or cultivated.

The evil of grief is in the struggle against suffering. Consent to suffer, and you will not suffer at all.

Answers to Correspondents.

Mr. Barry:—I have noticed an insect which works in the main stem of the peach tree, near the top, and in the branches. It is a new discovery to me; I cut off and burn the part affected. I should like to know whether this insect is one which would be likely to do much damage, if not attended to, I here send you a specimen of the work of the insect, which you will find very small, being near the pith.

Yours truly, Geo. Bishop, Jr.

La Fayette, N. Y., Oct., 1847.

The grubs found in the pith of the branch sent, are the young of some of the tree borers that occasionally, though very seldom, attack the soft wood of the peach. No serious danger is to be apprehended from them, though it is very important that their increase be prevented as far as possible, in the way you do, *cut off the parts and burn them.*

T. W. P., *Weymouth, Ohio.* The following is a select list of pears that succeed well on the quince: *Summer*—Madeleine, Jargonelle, Belle of Brussels, Summer Francreal, Doyenne d'Ete. *Autumn*—White Doyenne, Gray Doyenne, Bartlett, Duchess d' Angouleme, Louise, Beurre de Jersey, Fondante d' Automne, Beurre Diel, Countess of Lunay, Golden Beurre of Bilboa.—*Winter*—Glout Morceau, Passe Colmar, Chaumontelle, Easter Beurre, Beurre d' Arremberg, and Vicar of Winkfield.

The inquiries of A. W. W. will receive attention next month.

The Currant.

We are glad to observe a considerable degree of attention given to the improvement of this most valuable of all the small fruits. For years its importance seems to have been greatly overlooked or underrated—while special shows and high premiums have every where been bestowed on the Strawberry and Gooseberry, neither of which, in our opinion, can be compared for general usefulness to the Currant. The latter has been permitted to remain as though it had attained the ultimatum of perfection. This is very far from being true. The *Red and White Dutch,* the best varieties now in general culture, are no doubt very good; but we have every reason to believe that in a few years they will stand in the same relation to our *best* varieties that the *common* Mazzard cherry does to the Black Tartarian or Bigarreau, or as our common wood strawberry to Hovey's seedling.

We see several new varieties noticed in England and France, said to combine large fruit with fine flavor. We have taken pains to procure all the varieties of noted merit, and in a year or two shall have them fully tested here. The following notice of one of the best, we copy from Hovey's Magazine:

MAY'S VICTORIA CURRANT.

In our article upon the cultivation of the Currant, in a previous volume, (vii. p. 325,) we offered some remarks upon the importance of raising currants from seed with a

view to the production of new and improved varieties.—Among the smaller fruits, none possess a greater value than the currant, and yet none have received less attention at the hands of cultivators. Mr. Knight, impressed with the idea that very superior kinds would be the result of proper attention to the growth of seedlings, wrote an article upon the subject which was published in the *Transactions* of the Society. He also raised a great number of seedlings, and three of them were thought to possess such merits as to be deserving of names. The gooseberry has been improved from a small and austere berry to a very large and delicious fruit: the strawberry has also been produced of such size and flavor as to be scarcely recognized as the offspring of the wild berry of the woods and pastures. And why may not the same success attend experiments to improve the currant? There is no reason to doubt they will, and we may yet hope to see currants nearly as large as cherries, and possessing a flavor much sweeter and richer than any we now possess.

The White and Red Dutch currants have been cultivated for a great length of time, and have not, until now, been displaced by any new varieties. Mr. Knight's seedlings, though good, did not supersede these old sorts. We have, however, in the variety under notice, one which bids fair to take a place at the head of all. This is "May's Victoria."—Though recently raised from seed, and as yet confined to a limited number of collections, its merits are so great that it will soon find its way into every garden. The berries are of very large size, of a rich deep color, often measuring five-eighths of an inch in diameter, and the bunches are from five to six inches long. The flavor is also excellent, and,—what is of great importance,—the fruit will hang in perfection for a much longer time than the White or Red Dutch.

This variety was raised by Mr. Wm. May, nurseryman, of Yorkshire, Eng., and the fruit was exhibited at one of the shows of the London Horticultural Society, and was awarded the prize both for its size and excellence. It has been but little disseminated, owing to the high price of the plants; but, as they are easily multiplied, we may soon hope to see it introduced into every garden where the production of fine fruit is an object.

Our plants produced a few specimens last year, and, from the ordinary size of the clusters and berries, we thought it had been overrated; but, the present season, when the bushes had acquired sufficient strength to bear a crop, we were happily disappointed in finding the fruit and bunches of such large size and beautiful appearance; and our drawing (Fig. 67) is an accurate representation, by measurement, of the size of both berry and bunch.

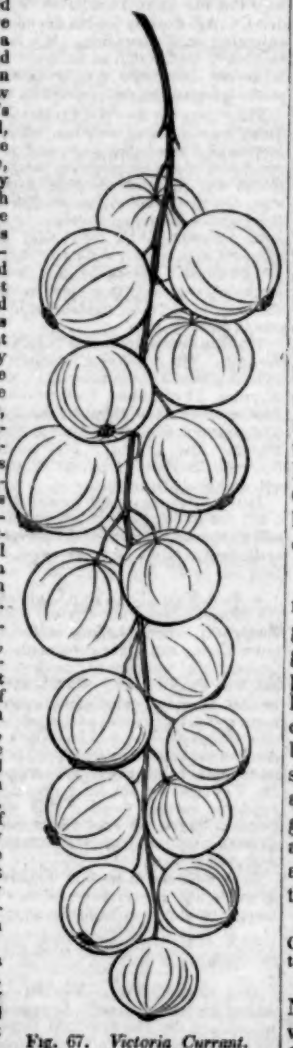


Fig. 67. *Victoria Currant.*

The plants are of exceedingly vigorous habit, with foliage differing from the White and Red Dutch in being thicker, deeper green, and not so finely cut at the edges: in good rich soil, the annual shoots are very stout and strong.

The currant, as we have stated in the article before alluded to, requires to be severely pruned when the object is large and handsome bunches and berries. It would be useless to expect fine fruit unless this is attended to. At the spring pruning, every new shoot should be headed back to four or five eyes, and the old wood wholly cut out, or as much of it as possible, as it is only on the young and vigorous wood that the best fruit is produced. By attending to these suggestions, the cultivator may have the finest fruit.

We may therefore highly recommend the Victoria currant; and, as its production is one step towards a superior fruit, we hope our amateur cultivators may be induced to follow up the experiment until something still better shall be the result.

We find the history of this currant given in a recent number of the Gardner's Chronicle, from its discoverer Mr. CHARLTON, a well known nurseryman in Northumberland. It appears that some 40 years ago, Mr. C., then an apprentice to a jobbing gardener who took care of Capt. Smith's gardens at Houghton Castle, was sent to gather red currants. In the course of his labors he came to a bush, the last in the row, which bore large, superior fruit. He then went to his master to inquire what sort it was. He replied he did not know; but went and looked at it, and then remembered that when he planted the row he lacked one plant, and looking around the garden found a seedling under a gooseberry bush, which he took and planted—and this proves to be the bush in question. It was then propagated extensively, and when Mr. CHARLTON commenced a nursery on his own account, he advertised and sold it as the Houghton Castle Currant. It has since been called "Victoria" and "Raby Castle Red" Currant, by other cultivators, and has been received in this country under the name of May's Victoria Currant.

A CURIOUS FLOWER.—A singular phenomenon, says a French paper, has shown itself in a greenhouse at Lyons. At the time when all the growers of camellias, roses, dahlias, &c., are puzzling themselves to get the blue color, the only shade which nature has refused to these kind of plants, chance has thrown a shade of azure blue upon the petals of flowers produced by one single branch of a camellia root of the species ambricala rubra. This plant belongs to M. Dagene. The interior petal of the flowers are of a delicate red, the superior are white, and both are united with blue. The flower thus unites three additional colors.

MARRIED, at Oberlin, O., on the 4th ult., by Prof. H. Cowles, Mr. M. B. BATEHAM, editor of the Ohio Cultivator, to Miss LOUISA JANE LOVELL, late of Unionville.

Mr. BATEMAM's numerous friends in Western N. York and elsewhere, will, we are sure, unite with us in congratulating him upon his escape from *bachelorism*. We are assured that the fair partner he has chosen is eminently qualified to make him happy at home, and aid him in the management of his Cultivator and "little farm"—just *the* one he has long been seeking.

Banking Fruit Trees.

Mr. Editor:—I transplanted last November (15th,) in a light sandy soil, with a northern and western aspect, about 150 fruit trees, (apples, pears, plums, and cherries.) Dug the holes about four feet diameter and from fifteen to eighteen inches deep; deposited very old stable manure and leached ashes, without giving the roots any water. In the spring (last) the trees were late in exhibiting their leaves, which I attributed to the banking remaining (until the 1st May) a longer period than ought to have been allowed. I lost *one apple* tree only, but the branches of *every apple* tree, without exception, were killed from one foot to three or four feet in length. The trees sprouted again below where they were killed, and are doing well. The cherries, plums, and pears were not affected with the frost.

I would inquire whether it is to be attributed to the fact that after I had transplanted, only one shower of rain fell before the earth was hard frozen—and that *that* rain could not have penetrated more than an inch and a half in the embankment, so that the roots were not moist enough; or was it owing to the effect, that the roots, (in consequence of the banking,) being kept warm, caused too much life in the branches when the severe frosts came?

About two weeks ago I observed five apple trees with knobs around the stem at the surface of the earth, similar to the black knot on the plum tree. If it is a disease, what is the remedy?

One of the pear trees did not put forth any leaves in the spring, but the bark continued green the whole season to the present moment. In July and August I fastened a cloth around it from top to root, and kept it moistened without giving the roots any extra watering except the dripping from the cloth. A few buds just appeared, but did not shoot into leaves; had I attended to it more carefully I have no doubt it would have put forth leaves. I mention this for the information of others, as well as to obtain further information. I am, dear sir, yours, &c.,

Avon, Oct. 30, 1847. W. A. W.

Remarks.—We do not consider that either the absence of rain after planting, or the heat maintained around the roots by the embankment, would produce death in the tops of the branches. If trees be transplanted early in the fall while the ground is in a very dry state, and the young wood of trees soft and immature, a lack of moisture might cause the ends of the branches to shrivel and die; but this could hardly be the case in the middle of November, in this latitude, as we are then usually well supplied with rain.—The embankment would have a tendency to prevent, instead of cause, winter killing.

The "knobs around the stem at the surface of the earth," are not, we presume, the result or symptoms of any disease, but merely granulations of the sap, which often appear on root grafted apple trees at the union of the stock and graft. They are seldom seen, however, on thrifty, well grown trees, with healthy roots.

Your pear that had not vigor enough to develope its buds should have been cut back till within a few buds of the base, and the roots should have received a watering occasionally, and the roots, if unsound, should have been cut back to the sound wood, to enable them to emit new fibres.

Apples to China.—One hundred barrels of magnificent pippin apples, from the Pelham farm, Ulster county, N. Y., were recently shipped from Boston to China. This is the first shipment ever made of this fruit to that part of the globe. The trade may yet be equal to that with England.

Acknowledgments.

We are under obligations to E. A. McKay, Esq., of Naples, for splendid specimens of sweet and sour apples, two varieties new to us. They were somewhat past their prime; but judging from what flavor was left, and more particularly from their large size and beautiful appearance, they are well worthy of attention.

— Some unknown friend for a basket of specimen apples, as follows: No. 1, Baldwin; No. 2 appears to be Jonathan; No. 3, White Spanish Reinette of Downing, usually grown here as Holland Pippin; No. 6, Autumn Pearmain; No. 7 appears to be the Alexander; we are not certain of this as it was partially decayed. No. 8. Don't know; No. 13, don't know—had become quite mealy.

— S. W. Cole, Esq., of the Boston Cultivator, for a box of specimens, which we shall speak of next month.

— C. Goodrich, Esq., Burlington, Vt., for a copy of the report of the Annual Cattle Show and Fair of the Chittenden Co. Ag. Society; with the address of J. W. May, Esq., delivered on the occasion. We have been in the habit of looking to that region as unfavorable for fruit culture; but whatever difficulties may be presented by climate or soil seems about to be surmounted by zeal and perseverance.

The report says— "Of Fruits the show was magnificent. Many were present who had lately seen the splendid collection of fruits at Saratoga, and we heard but one opinion expressed of the comparative merits of the two exhibitions, which was that the show of Apples, Pears, Plums, and even Grapes and Peaches at Burlington excelled that at Saratoga,—showing conclusively that at least in all the more valuable fruits the Valley of Lake Champlain can compete successfully with any part of the world.

"Of Garden Vegetables the show was extensive, and as to quality it is only necessary to say, that at a sale held at the close of the Fair, squashes sold at $1.00, and water-melons at $3.00 each."

Mr. Goodrich carries off a large share of the premiums for fruit. He receives a premium for the greatest variety of fruit grown by one individual, viz: 55 sorts of apples, 11 of pears, 11 of plums, 6 of grapes, and 3 of peaches. He also receives a premium for the 5 best fall apples—Porter, Gravenstein, Scarlet Nonpareil, Fameuse, and new Baking Sweet. Also for the 5 best winter apples—Hubbardson Nonsuch, Baldwin, Danvers Winter Sweet, Roxbury Russet, and R. I. Greening.

Jno. N. Pomeroy was awarded the premium for the best 5 fall pears—Bartlett, St. Michael's White Doyenne, Gansell Bergamot, Seckel, and VanNess. Fondante d'Autome, or Belle Lucrative, was awarded the premium as the best new fall pear; and Gravenstein as the best new fall apple.

— F. S. Rew, Esq., for a Legislative document containing the Report of the State Library Committee, Message of the Governor, communication of the trustees of the State Library Com., and other documents relative to the system of international exchanges, projected and conducted by the eminent Vattemare. This is one of the most noble of all modern projects, calculated, in an eminent degree, to promote the advancement of the arts and sciences, the cultivation of literature, and indeed the mental and moral improvement of nations—forming them, as it were, into an immense intellectual brotherhood. The zeal and energy with which Mr. Vattemare has for years, unaided and at his own expense, carried forward this philanthropic scheme has justly attracted universal admiration, and we view his labors as eminently calculated to promote union, peace, and good will among men.

In this document we find "instructions" on the best mode of collecting, preserving and forwarding objects of natural history, which we shall refer to at another time.

— S. Harris, of Canandaigua, for an excellent communication,—which will be attended to next month.

Our next Volume.—We have just room enough, before adding finis to volume 8, to remark that we shall endeavor to improve the Horticultural Department next year. The Publisher promises us "ample room and verge enough," with superior illustrations, &c., which will enable us to make this department more interesting and acceptable.—Meantime we trust our horticultural friends will lend a portion of their influence to increase our subscription list in their respective localities,—a matter quite essential to the publisher, whose expenses are necessarily heavy.

LADIES' DEPARTMENT.

Domestic Items.

Washing Flannel.—If white, it should be done in as hot water as possible, with hard soap.

Shrinking of Flannel.—Enclose new Flannel in a bag; put it into a boiler with cold water; heat and boil it. It will never shrink any more after this operation, and should then be made up into garments.

Fragments of Bread may be all saved by making them into toast and puddings; and they also make good pancakes, by soaking over night in milk and then adding an egg or two, and a little salt and flour.

Preserves—if fermenting, boil them and add a little powdered salæratus, say size of a pea for a quart or two, but more if much fermented.

Feather Beds should be aired once a week; but do not hang them out of the front windows, unless you wish to add a striking feature in the picturesque expression of your dwelling.

Moths.—Camphor (not tobacco) will repel moths. Flannels well wrapped in linen, are safe from moths. But they should be well brushed about the first day of summer, as the moths then begin to increase.

Suet and Mince-Pie Meat, if boiled and chopped, may be kept a year, in a stone jar, under molasses.

Vials, with medicines, should be kept constantly and very distinctly labelled—it would prevent some fatal accidents.

Molasses, used for cooking, is immensely improved by previous boiling and skimming.

Straw Beds are generally improved by being boxed at the sides, or stitched through like mattrasses.

Sausages.—The best proportions are 3 lbs. salt, 10 oz. sage, 10 oz. pepper, to every 100 lbs. chopped meat.

Eggs, wholly embodied in salt, the small end downwards, will keep one to three years perfectly fresh.

Heated Rooms.

Rooms heated with anthracite coal, and rooms heated with close stoves in which wood is burnt, have veay dry atmospheres. The use of water in such rooms is very congenial to health, but the water should not be placed in an iron or tin vessel upon the stove, for the reason that it will undergo that degree of heat which will make its vapors offensive and injurious to breathe. It is as injurious to the human system to breathe putrid water vapors of this kind, as it is to breathe the vapors from stagnant ponds in hot weather. If water is used upon a stove, an iron pan should be made use of, and this filled with dry sand; in the sand set an earthen bowl filled with clean water, which should be changed twice a day, and the bowl washed and kept as clean as if used for a drinking vessel.

Where hard coal is burnt in a grate, a glass globe should be suspended in the room filled with clean pure water, and as the heated air rises to the top of the room, it will steadily evaporate the water and moisten the dry and heated air. Persons who prefer the atmosphere of salt water vapor, can add salt to the water, or if they prefer an aromatic atmosphere, they can add Cologne water, or any other perfume which they prefer. It is as important to have clean air for breathing as to have clean water for drinking. Basement rooms, where hard coal is burnt, should be frequently ventilated. Small children accustomed to stay in basement rooms find a bad air near the floor. This air should be removed by allowing the doors to be opened frequently to let in fresh air. A little care in these matters will tend wonderfully to comfort and enjoyment.—*Ex.*

To make Good Butter in Winter.—We often hear the complaint that winter butter is poor. Ours (says a correspondent of the Boston Cultivator) was so for several seasons. It was very slow in coming, and frothy, white, and sometimes bitter; while butter made from the same kind of milk in the warm season was good. I devised many plans for improvement, such as throwing in salt, warm milk, scalding cream, &c.; but to no purpose. At length I scalded my milk when brought from the cow, afterwards, setting it either in a cold or warm place as most convenient. I mean I communicated sufficient heat to my milk to destroy the effect which frosty feed in autumn or dry feed in winter had upon it. Since which time we have made (with fifteen minutes churning) purer, sweeter, and more yellow butter than we ever made in summer—and sometimes from frozen cream gradually warmed. And were it not that the increase of manufactures, the pursuit of fashion, and other causes combined, render helping hands in the dairy room now-a-days very scarce, I should be at the trouble of scalding my milk before setting it, during the summer, as well as in winter, for surely, butter made in this way possesses a delicious richness and dryness which can not be found in any other.

How to Cook Green Corn.—If the following is worth publishing in your paper, it is at your service, as its truth cannot be controverted: Green corn, to be healthy, should be boiled till it is perfectly done; that is, if it is full grown or nearly ready to glaze, it should be boiled at least three hours, when it may be eaten to a reasonable amount, by almost any person.

T. P.

The above may prove valuable to those who preserve the Farmer, or have good memories—though not in season, just now.

Extracts of Letters from the People.

☞ The subjoined extracts from letters received since the commencement of the present volume, show the estimation in which the Genesee Farmer is generally held. We have received many similar evidences of approval and encouragement from almost every section of the Union:

A Post-Master in Seneca County writes—"I am making an effort, in order to procure a *respectable* list of subscribers for your paper in this town. You ought to be patronized by every farmer in the land—yes, by every person who only plants a Garden, in my estimation. Only the price of one bushel of corn will pay for the 'Farmer' a year; this year it would have paid for it *two years*. It is astonishing to me that every farmer does not possess himself of it.—Only hand 50 cents to his Post-Master, who will cheerfully forward it to the publisher in most cases, I presume, and the work would be sent to him. I wish I had *fifty dollars* to enclose to you, for subscribers in this town. I will do all I can, by obtaining subscriptions and sending the money to you."

An influential farmer of Jefferson county, in a letter remitting payment for 16 copies of the Farmer, says:—"As an individual I have been much pleased with the general matter of the Farmer for the last year, and am gratified to notice a large increase in the number of subscribers. I consider the articles treated of by its able Editor an excellent selection, and admirably discussed—and well adapted to inform the minds of the farming community on those subjects in which their interests are most intimately connected."

An esteemed friend and able correspondent of several agricultural journals, thus writes us:—"The Farmer has also gained more within the last year in reputation, as a scientific and literary paper, than most of its cotemporaries. If farmers generally do not yet appreciate it, it is only because they can not. I trust it will not be so always, as progress is busy with her wand, throughout our favored land."

A staunch friend at Romulus, N. Y., in a letter containing a remittance for 21 subscribers, thus speaks of the Farmer:—"I answer for myself that the last volume was worth more than any previous one in my opinion. If I am not mistaken I have been a subscriber to the Farmer for the last 16 years, and I am satisfied that it has had an influence upon me, and from it I have derived many new ideas in the science of agriculture. I believe if it had been read by every farmer in Western New York, (though he might not have more than two acres of land to cultivate,) the quantity of produce would have been increased 20 per cent—and the quality, as a general rule, would have been much improved."

In renewing his subscription, an able farmer, residing in Geneseo, says:—"I wish to continue the Genesee Farmer another year, considering it as I do the best Agricultural Paper now extant. I am very much gratified to see the improvements which are being made in agriculture, (a business which was considered of quite minor importance but a few years ago,) and sincerely hope that it may attain the highest rank in the land."

An intelligent farmer of Truxton, Cortland county, in a letter containing a remittance for 19 copies of the Farmer, says:—"I have obtained these within the last two weeks without making any unusual effort, only asking my neighbors when I saw them to take the Farmer—the paper recommending itself. I shall probably obtain more subscribers, in the course of the winter, as I know of several who have taken the last volume, who, if asked, will doubtless take the present."

Our Cortland friend takes the right course. If each of our subscribers will *show the Farmer to his neighbors, and ask them to subscribe*, the usefulness of the paper may soon be greatly increased. In these days of *low prices of printing*, and *high prices of produce*, every farmer can afford to take an agricultural paper.

Monroe County Agricultural Society.

The Annual Meeting of this Society, for the election of Officers, &c., will be held at the Office of the *Genesee Farmer*, in Rochester, on the *second Tuesday* (the 14th day) of December next, at 10 o'clock, A. M. A punctual attendance is requested.

Nov. 1, 1847. JAMES H. WATTS, *Rec. Sec'y.*

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,	$1 18		Pork, bbl. mess	12 50	16 50
Corn,	50		Pork, cwt.,	5 00	
Barley,	56		Beef, cwt.,	3 50	4 00
Oats,	40		Lard, lb.,	9	10
Flour,	5 25	5 37	Butter, lb.,	15	16
Beans,	62		Cheese, lb.,	6	7
Apples, bush.	25		Eggs, doz,	16	
Potatoes,	59		Poultry,	6	
Clover Seed,	4 50	5 00	Tallow,	10	
Timothy,	1 25	2 00	Maple Sugar,	—	
Hay, ton,	10 00	12 00	Sheep Skins,	75	
Wood, cord,	2 75	3 50	Green Hides, lb	3½	
Salt, bbl,	—		Dry "	7	8
Hams, lb,	10	10½	Calf Skins,	8	

Rochester, Nov. 29, 1847.

New York Market.

[*By Magnetic Telegraph.*]

New York, Nov. 27.—7 P. M.

Ashes.—Sales of Pots made at $5,75 *a* $5,87½, and 50 bbls. Pearls sold at $7,75 *a* 7.81½.

Beeswax was lower, and sales were made at 22 cts. for yellow.

Flour.—The sales embraced about 1200 bbls. Oswego at $6, with some lots Michigan at $6,12½. 1500 bbls. Genesee, deliverable next month, sold at $6,25. 200 do. on the spot at $6,25. Sales of good Ohio were made at $6,44.

Wheat.—Sales 100 bush. Genesee at $1,36. 1000 Ohio white at $1,31, 2700 Ohio at $1,29, and 3000 Delaware at $1,32 *a* $1,33.

Corn.—Sales 1000 to 1500 bush. including mixed at 73 cts. and round yellow at 75 cts.

Meal.—300 bbls. New Jersey sold at $3,50, 300 do. Pennsylvania at $3,44, and 500 do. Western at $3,25.

Rye.—Sales 500 bu. at 87 cts.

Provisions.—Sales 1000 bbls. mess Pork at $14,87½, and 30 do. thin mess at $13,62. Butter and Cheese dull.

Buffalo, Nov. 27.

This day has been the coldest of the season, and it has been snowing most of the day. Every thing in the market is dull and the sales were small.

Flour.—The receipts are light, and there is no change in quotations.

Grain.—Wheat is firm but inactive. We quote Chicago at 87c.; Racine 98c. Corn is steady but not active, and prices have slightly declined.

Provisions.—Pork may be quoted at $13 *a* 14 for mess.

Receipts for the last 24 hours were—Flour, 2500 barrels; wheat 32,000 bushels.

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